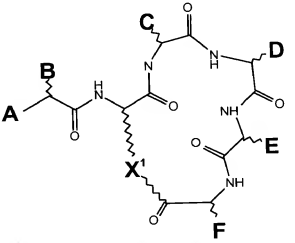
IN THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in this application:

Claims 1-9 (Cancelled).

Claim 10 (Previously Presented): A compound, which has antagonist activity against a C5a receptor, has no agonist activity against a C5a receptor, and has the general formula II:



where A is H, alkyl, aryl, NH_2, NHalkyl, $N(alkyl)_2$, NHaryl or NHacyl;

B is an alkyl, aryl, phenyl, benzyl, naphthyl or indole group, or the side chain of a D- or L-amino acid selected from the group consisting of phenylalanine, homophenylalanine, tryptophan, homotryptophan, tyrosine, and homotyrosine;

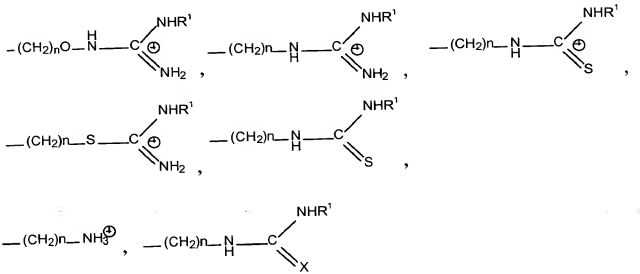
C is the side chain of a D-, L- or homo-amino acid selected from the group consisting of proline, alanine, leucine, valine, isoleucine, arginine, histidine, aspartate, glutamate, glutamine, asparagine, lysine, tyrosine, phenylalanine, cyclohexylalanine, norleucine, tryptophan, cysteine and methionine;

D is the side chain of a D- or L-amino acid selected from the group consisting of cyclohexylalanine, homocyclohexylalanine, leucine, norleucine, homoleucine, homonorleucine and tryptophan;

E is the side chain of a D- or L-amino acid selected from the group consisting of tryptophan and homotryptophan;

F is the side chain of a D- or L-amino acid selected from the group consisting of arginine,

homoarginine, lysine and homolysine or is one of the following side-chains



or another mimetic of an arginine side chain,

where

X is NCN, NNO_2, $CHNO_2$ or NSO_2NH_2;

n is an integer from 1 to 4, and

R^1 is H or an alkyl, aryl, CN, NH_2, OH, $-CO-CH_2CH_3$, $-CO-CH_3$, $-CO-CH_2CH_2CH_3$, $-CO-CH_2Ph$, or -CO-Ph; and

X^1 is $-(CH_2)_nNH-$ or $(CH_2)_n-S-$,$-(CH_2)_2O-$, $-(CH_2)_3O-$, $-(CH_2)_3-$, $-(CH_2)_4-$, or $-CH_2COCHRNH-$, where R is the side chain of any common or uncommon amino acid, and

where n is an integer of from 1 to 4.

Claim 11 (Previously Presented): The compound according to Claim 10, in which F is a L-amino acid.

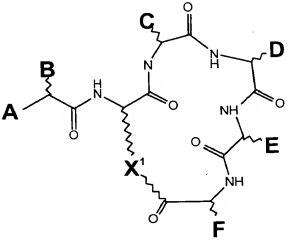
Claim 12 (Previously Presented): The compound according to Claim 11, in which F is L-arginine.

Claim 13 (Previously Presented): The compound according to Claim 10, which is a compound selected from the group consisting SEQ ID NOS: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and 28.

Claim 14 (Previously Presented): The compound according to Claim 10, in which n is 2 or 3.

Claims 15 and 16 (Cancelled).

Claim 17 (Previously Presented): A compound which is an agonist of the C5a receptor, and has the formula IV:

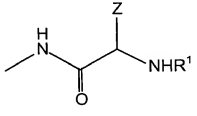


where A is any common or uncommon, basic, charged amino acid side chain which serves to position a positively charged group in this position;

B is a non-aromatic amino acid, and

C is any common or uncommon, hydrophobic amino acid side chain which serves to position any alkyl, aromatic or other group in this position; and

D is any common or uncommon, aromatic amino acid which serve to position an aromatic side-chain in this position, and has the structure:



where Z is indole, indole methyl, benzyl, benzene, naphthyl, naphthyl methyl, or a derivative thereof; and

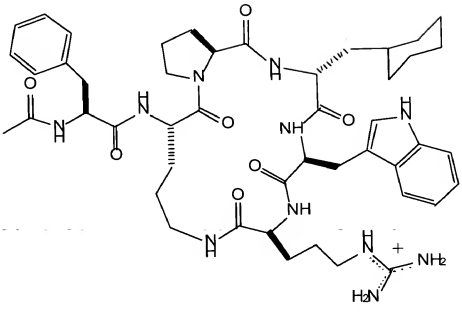
R is H or an alkyl, aromatic, acyl or aromatic-acyl group;

E is any amino acid other than tryptophan and homotryptophan, and

F is the side chain of a D- or L-amino acid selected from the group consisting of arginine, homoarginine, lysine and homolysine.

Claim 18 (Cancelled).

Claim 19 (Previously Presented): A compound having the formula



Claim 20 (Previously Presented): A composition comprising a compound according to Claim 10, together with a pharmaceutically-acceptable carrier or excipient.

Claims 21-32 (Cancelled).

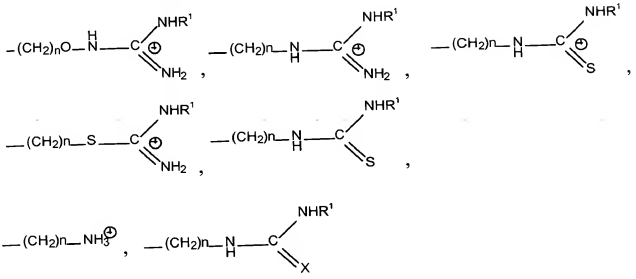
Claim 33 (Previously Presented): The composition of Claim 20, wherein in the compound of formula II, F is a L-amino acid.

Claim 34 (Previously Presented): The composition according to Claim 20, wherein in the compound of formula II, F is L-arginine.

Claim 35 (Previously Presented): The composition according to Claim 20, wherein the compound of formula II is a compound selected from the group consisting SEQ ID NOS: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and 28.

Claim 36 (Previously Presented): The composition according to Claim 20, wherein in the compound of formula II

F is one of the following side-chains



or another mimetic of an arginine side chain;

where

X is NCN, NNO_2, $CHNO_2$ or NSO_2NH_2;

n is an integer from 1 to 4, and

R^1 is H or an alkyl, aryl, CN, NH_2, OH, -CO-CH_2CH_3, -CO-CH_3, -CO-$CH_2CH_2CH_3$, -CO-CH_2Ph, or -CO-Ph;

B is an indole, indole methyl, benzyl, phenyl, naphthyl, naphthyl methyl, cinnamyl group, or any other derivative of the aromatic group; and

C is D- or L-cyclohexylalanine (Cha), leucine, valine, isoleucine, phenylalanine, tryptophan or methionine.

Claim 37 (Previously Presented): The composition according to Claim 36, wherein in the compound of formula II, R^1 is methyl, ethyl, propyl, or butyl.

Claim 38 (Previously Presented): The composition according to Claim 20, wherein the compound of formula II has the formula

Ac-Phe-[Lys-Pro-(dCha)-Trp-Arg] or

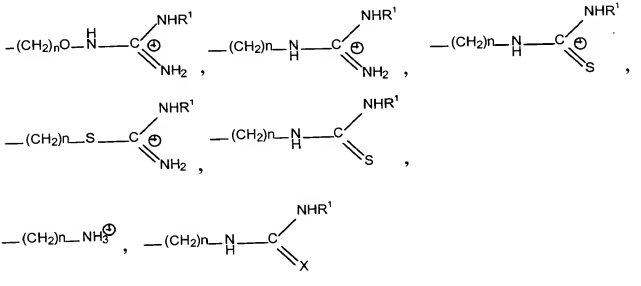
Ac-Phe-[Orn-Pro-(dCha)-Trp-Arg].

Claim 39 (Previously Presented): The composition according to Claim 20, in which F is L-arginine.

Claim 40 (Previously Presented): A composition comprising a compound according to Claim 17, together with a pharmaceutically acceptable carrier or excipient.

Claim 41 (Previously Presented): A composition comprising the compound of Claim 19, together with a pharmaceutically acceptable carrier or excipient.

Claim 42 (Previously Presented): The compound according to Claim 10, in which F is one of the following side-chains



or another mimetic of an arginine side chain;

where

X is NCN, NNO_2, $CHNO_2$ or NSO_2NH_2;

n is an integer from 1 to 4, and

R^1 is H or an alkyl, aryl, CN, NH_2, OH, -CO-CH_2CH_3, -CO-CH_3, -CO-$CH_2CH_2CH_3$, -CO-CH_2Ph, or -CO-Ph;

B is an indole, indole methyl, benzyl, phenyl, naphthyl, naphthyl methyl, cinnamyl group, or any other derivative of the aromatic group; and

C is D- or L-cyclohexylalanine (Cha), leucine, valine, isoleucine, phenylalanine, tryptophan or methionine.

Claim 43 (Previously Presented): The compound according to Claim 33, in which R^1 is methyl, ethyl, propyl, or butyl.

Claim 44 (Previously Presented): The compound according to Claim 10, which has the formula

Ac-Phe-[Lys-Pro-(dCha)-Trp-Arg] or

Ac-Phe-[Orn-Pro-(dCha)-Trp-Arg].

Claim 45 (Previously Presented): The compound according to Claim 10, in which A is L-arginine.

Claim 46 (Previously Presented): A method of antagonizing the activity of a C5a receptor on a cell, comprising contacting the cell with the compound of Claim 10 in an amount sufficient to antagonize the activity of the C5a receptor on the cell.

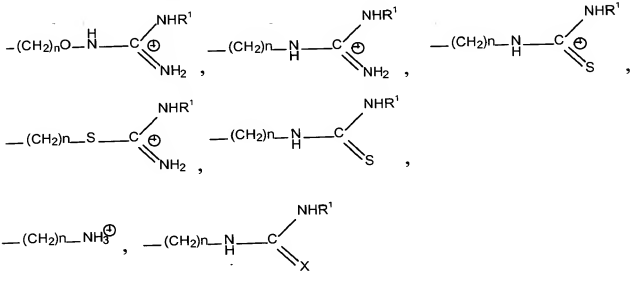
Claim 47 (Previously Presented): The method according to Claim 46, wherein in the compound of formula II, F is a L-amino acid.

Claim 48 (Previously Presented): The method according to Claim 46, wherein in the compound of formula II, F is L-arginine.

Claim 49 (Previously Presented): The method according to Claim 46, wherein the compound of formula II is a compound selected from the group consisting SEQ ID NOS: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and 28.

Claim 50 (Previously Presented): The method according to Claim 46, wherein in the compound of formula II

F is one of the following side-chains



or another mimetic of an arginine side chain;

where

X is NCN, NNO_2, $CHNO_2$ or NSO_2NH_2;

n is an integer from 1 to 4, and

R^1 is H or an alkyl, aryl, CN, NH_2, OH, $-CO-CH_2CH_3$, $-CO-CH_3$, $-CO-CH_2CH_2CH_3$, $-CO-CH_2Ph$, or -CO-Ph;

B is an indole, indole methyl, benzyl, phenyl, naphthyl, naphthyl methyl, cinnamyl group, or any other derivative of the aromatic group; and

C is D- or L-cyclohexylalanine (Cha), leucine, valine, isoleucine, phenylalanine, tryptophan or methionine.

Claim 51 (Previously Presented): The method according to Claim 50, wherein in the compound of formula II, R^1 is methyl, ethyl, propyl, or butyl.

Claim 52 (Previously Presented): The method according to Claim 46, wherein the compound of formula II has the formula

Ac-Phe-[Lys-Pro-(dCha)-Trp-Arg] or

Ac-Phe-[Orn-Pro-(dCha)-Trp-Arg].

Claim 53 (Previously Presented): The method according to Claim 46, wherein in the compound of formula II, F is L-arginine.

Claim 54 (Previously Presented): The method of Claim 46, wherein the cell is in a mammal and said contacting comprises administering the compound to said mammal.

Claim 55 (Previously Presented): The method of Claim 47, wherein said mammal is a human.

Claim 56 (Previously Presented): A method of agonizing the activity of a C5a receptor on a cell comprising contacting the cell with the compound of Claim 17 in an amount sufficient to agonize the C5a receptor on the cell.

Claim 57 (Previously Presented): The method of Claim 56, wherein the cell is in a mammal and said contacting comprises administering the compound to said mammal.

Claim 58 (Previously Presented): The method of Claim 57, wherein the mammal is a human.

Claim 59 (Previously Presented): A method of agonizing the activity of a C5a receptor on a cell comprising contacting the cell with the compound of Claim 19 in an amount sufficient to agonize the C5a receptor on the cell.

Claim 60 (Previously Presented): The method of Claim 59, wherein the cell is in a mammal and said contacting comprises administering the compound to said mammal.

Claim 61 (Previously Presented): The method of Claim 60, wherein the mammal is a human.

Claim 62 (Currently Amended): A method of treating ~~an~~ inflammatory arthritis ~~condition~~ mediated by a C5a receptor, comprising the step of administering an effective amount of a compound according to claim 10 to a mammal in need thereof.

Claim 63 (Previously Presented): The method of claim 62, wherein the mammal is a human.

Claim 64 (Currently Amended): A method of treating inflammatory arthritis, comprising the step of administering an effective amount of a compound according to claim 10 to a mammal in need thereof.

Claim 65 (Previously Presented): The method of claim 64, wherein the mammal is a human.

Claim 66 (Currently Amended): A method of treating ~~an~~ inflammatory arthritis ~~condition~~ mediated by a C5a receptor, comprising the step of administering an effective amount of a compound according to claim 17 to a mammal in need thereof.

Claim 67 (Previously Presented): The method of claim 66, wherein the mammal is a human

Claim 68 (Currently Amended): A method of treating inflammatory arthritis, comprising the step of administering an effective amount of a compound according to claim 17 to a mammal in need thereof.

Claim 69 (Previously Presented): The method of claim 68, wherein the mammal is a human.

Claim 70 (Currently Amended): A method of treating ~~an~~ inflammatory arthritis ~~condition~~ mediated by a C5a receptor, comprising the step of administering an effective amount of a compound according to claim 19 to a mammal in need thereof.

Claim 71 (Previously Presented): The method of claim 70, wherein the mammal is a human.

Claim 72 (Currently Amended): A method of treating inflammatory arthritis, comprising the step of administering an effective amount of a compound according to claim 19 to a mammal in need thereof.

Claim 73 (Previously Presented): The method of claim 72, wherein the mammal is a human.

Claim 74 (New): The method of claim 62, wherein the inflammatory arthritis is rheumatoid arthritis.

Claim 75 (New): The method of claim 64, wherein the inflammatory arthritis is rheumatoid arthritis.

Claim 76 (New): The method of claim 66, wherein the inflammatory arthritis is rheumatoid arthritis.

Claim 77 (New): The method of claim 68, wherein the inflammatory arthritis is rheumatoid arthritis.

Claim 78 (New): The method of claim 70, wherein the inflammatory arthritis is rheumatoid arthritis.